



#4

SEQUENCE LISTING

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Michael Jarpe
Ted Ebendal

<120> METHODS FOR TREATING NEUROLOGICAL
INJURIES AND DISORDERS

<130> 47506 (71095)

<140> 09/756,481

<141> 2001-01-08

<150> PCT/US99/15106

<151> 1999-07-02

<150> 60/091,791

<151> 1998-07-06

<160> 2

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 1387

<212> DNA

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ccaggacctc	aaagcacccc	cgacctaagg	tcaccagccc	actggcccca	gacgcagtgg	180
gctccgctga	ctcttttggaa	caccccttgg	gaggaaa	atg ctc cct	gtc tgc cat	235
				Met Leu Pro	Val Cys His	
				1	5	

cgt	ttt	tgc	gac	cac	ctc	ctc	ctg	ctc	ttg	ctg	ccc	tcg	acg	acc	283	
Arg		Phe	Cys	Asp	His	Leu	Pro	Ser	Thr	Thr						
						10			15				20			

ctg	gcc	ccc	gcg	cca	gca	tcc	atg	ggc	ccc	gct	gcc	gcc	ctg	ctc	cag	331
Leu	Ala	Pro	Ala	Pro	Ala	Ser	Met	Gly	Pro	Ala	Ala	Ala	Leu	Leu	Gln	
							25		30				35			

gtt	ctt	ggg	ctt	ccc	gaa	gcg	ccc	cg	agc	gtc	ccc	aca	cac	cga	cct	379
Val	Leu	Gly	Leu	Pro	Glu	Ala	Pro	Arg	Ser	Val	Pro	Thr	His	Arg	Pro	
							40		45			50				

gtg cct cct gtc atg tgg cgc cta ttc cgt cgc cgt gac ccc cag gag	55	60	65	70	427
Val Pro Pro Val Met Trp Arg Leu Phe Arg Arg Arg Asp Pro Gln Glu					
gcc aga gtg gga cgc cct ctg cgg cca tgc cac gtg gag gaa cta ggg	75	80	85		475
Ala Arg Val Gly Arg Pro Leu Arg Pro Cys His Val Glu Glu Leu Gly					
gtc gcc gga aac att gtg cgc cac atc ccc gac agc ggt ctg tcc tcc	90	95	100		523
Val Ala Gly Asn Ile Val Arg His Ile Pro Asp Ser Gly Leu Ser Ser					
agg ccc gca caa ccc gcc agg acc tcg ggg ctg tgc ccc gag tgg aca	105	110	115		571
Arg Pro Ala Gln Pro Ala Arg Thr Ser Gly Leu Cys Pro Glu Trp Thr					
gtc gtc ttt gac ctg tcg aat gtg gag ccc aca gag cgc cca aca cgc	120	125	130		619
Val Val Phe Asp Leu Ser Asn Val Glu Pro Thr Glu Arg Pro Thr Arg					
gcg cgc tta gag ttg cgg ctg gag gct gag tgt gaa gat aca gga ggg	135	140	145	150	667
Ala Arg Leu Glu Leu Arg Leu Glu Ala Glu Cys Glu Asp Thr Gly Gly					
tgg gag cta agc gtg gca ctg tgg gcc gac gca gag cat cca ggg cct	155	160	165		715
Trp Glu Leu Ser Val Ala Leu Trp Ala Asp Ala Glu His Pro Gly Pro					
gag ctg ctg cgc gtg ccg gcg cca cca ggg gtg ctc ctg cgc gca gac	170	175	180		763
Glu Leu Leu Arg Val Pro Ala Pro Gly Val Leu Leu Arg Ala Asp					
cta ctg ggg act gca gta gcc gcc aac gca tca gtg ccc tgt act gtg	185	190	195		811
Leu Leu Gly Thr Ala Val Ala Ala Asn Ala Ser Val Pro Cys Thr Val					
cgc ctg gcg ctg tca ctg cac cct ggg gcc act gca gcc tgt ggg cgc	200	205	210		859
Arg Leu Ala Leu Ser Leu His Pro Gly Ala Thr Ala Ala Cys Gly Arg					
ctg gct gag gcc tcc ctg ctg gtg acg ctg gac cca cgc ctg tgt	215	220	225	230	907
Leu Ala Glu Ala Ser Leu Leu Leu Val Thr Leu Asp Pro Arg Leu Cys					
ccc ttg ccg cga ttg cgg cgc cac acg gag ccc agg gta gaa gtt ggt	235	240	245		955
Pro Leu Pro Arg Leu Arg Arg His Thr Glu Pro Arg Val Glu Val Gly					
cca gtg ggc act tgt cgt acc cga cgg ttg cat gtg agc ttc cgt gag	250	255	260		1003
Pro Val Gly Thr Cys Arg Thr Arg Arg Leu His Val Ser Phe Arg Glu					

gtg ggc tgg cac cgt tgg gtg atc gcg ccg cgt ggc ttc cta gcc aac	1051
Val Gly Trp His Arg Trp Val Ile Ala Pro Arg Gly Phe Leu Ala Asn	
265 270 275	
ttc tgc cag ggc acg tgc gca cta ccc gaa acg ctg agg gga ccc ggc	1099
Phe Cys Gln Gly Thr Cys Ala Leu Pro Glu Thr Leu Arg Gly Pro Gly	
280 285 290	
ggg ccg cct gca ctc aac cac gct gtg ctg cgc gcg ctc atg cac gca	1147
Gly Pro Pro Ala Leu Asn His Ala Val Leu Arg Ala Leu Met His Ala	
295 300 305 310	
gct gct ccc acc ccg ggt gca ggc tcg ccc tgc tgc gtg cca gag cgt	1195
Ala Ala Pro Thr Pro Gly Ala Gly Ser Pro Cys Cys Val Pro Glu Arg	
315 320 325	
cta tca ccc atc tcc gtg ctc ttc gac aat agt gac aac gtg gtc	1243
Leu Ser Pro Ile Ser Val Leu Phe Phe Asp Asn Ser Asp Asn Val Val	
330 335 340	
ctg cga cac tac gaa gac atg gtg gtg gat gag tgt ggc tgc cgt	1288
Leu Arg His Tyr Glu Asp Met Val Val Asp Glu Cys Gly Cys Arg	
345 350 355	
tgaccacccg ggacaccctt tcagggaccg cccacgcaa aagcagggac tgtttgttca	1348
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20 25 30	
Ala Ala Ala Leu Leu Gln Val Leu Gly Leu Pro Glu Ala Pro Arg Ser	
35 40 45	
Val Pro Thr His Arg Pro Val Pro Pro Val Met Trp Arg Leu Phe Arg	
50 55 60	
Arg Arg Asp Pro Gln Glu Ala Arg Val Gly Arg Pro Leu Arg Pro Cys	
65 70 75 80	
His Val Glu Glu Leu Gly Val Ala Gly Asn Ile Val Arg His Ile Pro	
85 90 95	
Asp Ser Gly Leu Ser Ser Arg Pro Ala Gln Pro Ala Arg Thr Ser Gly	
100 105 110	
Leu Cys Pro Glu Trp Thr Val Val Phe Asp Leu Ser Asn Val Glu Pro	
115 120 125	
Thr Glu Arg Pro Thr Arg Ala Arg Leu Glu Leu Arg Leu Glu Ala Glu	
130 135 140	

Cys Glu Asp Thr Gly Gly Trp Glu Leu Ser Val Ala Leu Trp Ala Asp
145 150 155 160
Ala Glu His Pro Gly Pro Glu Leu Leu Arg Val Pro Ala Pro Pro Gly
165 170 175
Val Leu Leu Arg Ala Asp Leu Leu Gly Thr Ala Val Ala Ala Asn Ala
180 185 190
Ser Val Pro Cys Thr Val Arg Leu Ala Leu Ser Leu His Pro Gly Ala
195 200 205
Thr Ala Ala Cys Gly Arg Leu Ala Glu Ala Ser Leu Leu Leu Val Thr
210 215 220
Leu Asp Pro Arg Leu Cys Pro Leu Pro Arg Leu Arg Arg His Thr Glu
225 230 235 240
Pro Arg Val Glu Val Gly Pro Val Gly Thr Cys Arg Thr Arg Arg Leu
245 250 255
His Val Ser Phe Arg Glu Val Gly Trp His Arg Trp Val Ile Ala Pro
260 265 270
Arg Gly Phe Leu Ala Asn Phe Cys Gln Gly Thr Cys Ala Leu Pro Glu
275 280 285
Thr Leu Arg Gly Pro Gly Gly Pro Pro Ala Leu Asn His Ala Val Leu
290 295 300
Arg Ala Leu Met His Ala Ala Ala Pro Thr Pro Gly Ala Gly Ser Pro
305 310 315 320
Cys Cys Val Pro Glu Arg Leu Ser Pro Ile Ser Val Leu Phe Phe Asp
325 330 335
Asn Ser Asp Asn Val Val Leu Arg His Tyr Glu Asp Met Val Val Asp
340 345 350
Glu Cys Gly Cys Arg
355